



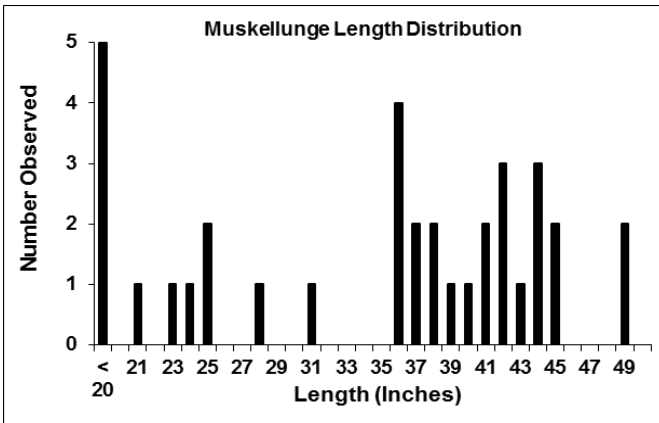
WISCONSIN DNR
FISHERIES INFORMATION SHEET

LAKE: Roberts Lake

COUNTY: Forest

YEAR: 2016

The Wisconsin Department of Natural Resources is conducting a two-year (2016-17) comprehensive survey of Roberts Lake, Forest County, to analyze the health of its fishery. Roberts Lake is located approximately 10 miles southeast of Crandon, with boat access off of MacArthur Trail. Roberts Lake covers 415 acres and achieves a maximum depth of 32 feet.



* Note: Adult muskellunge are defined as all sexually mature fish and all fish of unknown sex ≥ 30 inches long.

Muskellunge



The 2016 survey started with a fyke net survey for muskellunge from 4/27-5/10/2016. During this survey a total of 21 different muskellunge were captured. Five electrofishing surveys were conducted between 5/2 and 5/24, during which 14 more muskellunge were captured.

All muskellunge captured during 2016 were marked with a fin clip and internal tag. Another sample of muskellunge will be conducted in 2017. During the 2017 survey, we will use the ratio of new fish to previously captured fish to estimate the abundance of muskellunge in Roberts Lake.

All 35 different muskellunge captured during 2016 were measured to assess size structure. These fish ranged from 13.1 to 49.7 inches in length. The size structure of the fish sampled during 2016 was good with 76.7% of the fish sampled over 20 inches being ≥ 34 inches, and 46.7% ≥ 40 inches.

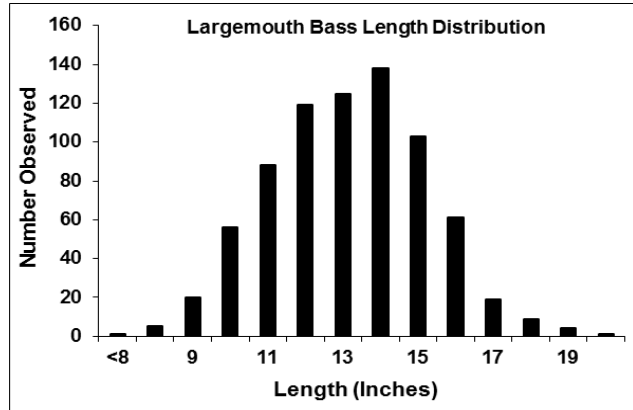
Largemouth Bass



Largemouth bass were captured during our spring fyke net survey and 4 spring electrofishing surveys from 5/2 to 5/18. During these surveys a total of 478 different largemouth bass were given an identifiable fin clip. These fish were allowed to mix back into the population before we conducted our "recapture" survey on 5/24. During the recapture survey a total of 315 largemouth bass were captured, with 44 fish bearing the fin clip given during the "marking" survey. The data obtained from our bass surveys estimate the largemouth bass population (≥ 8 inches) to be approximately 3,780 fish, with a 95% confidence range of 2,405-5155 fish. At approximately 9.1 adults/acre the Roberts Lake population is considered overly abundant when compared to the other lakes in this region that average slightly more than 3 largemouth bass per acre.

A total of 749 different Largemouth bass were captured and measured to assess the size structure of the population. Roberts Lake largemouth bass have a moderate-to-poor size structure with approximately 44.8% of the largemouth bass captured being ≥ 14 inches and 1.9% ≥ 18 inches.

Poor size structure in high density populations is common. If we were able to reduce the abundance through a regulation change the size structure would likely improve.



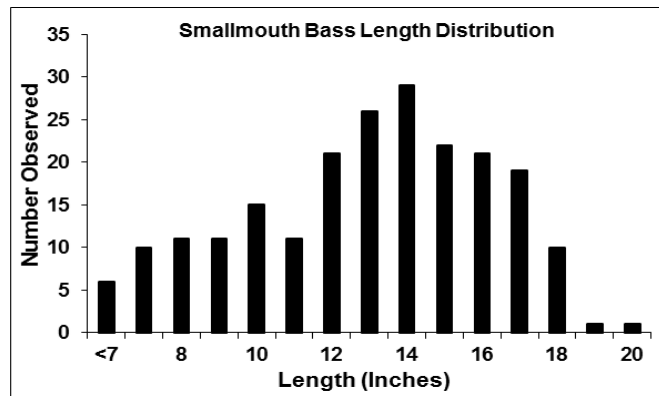
* Note: Adult bass are defined as all bass ≥ 8 inches long.

Smallmouth Bass



During the same surveys conducted for largemouth bass, we also captured smallmouth to estimate the smallmouth bass population in Roberts Lake. A total of 96 different smallmouth bass were captured during the "marking" survey and given an identifiable fin clip. During the "recapture" survey, a total of 119 smallmouth bass were captured, with 17 fish (14%) bearing a clip from the "marking" survey. This data estimates the smallmouth bass population (≥ 8 inches) to be approximately 754 fish, with a 95% confidence range of 320-1,188 fish. At approximately 1.8 adults/acre this is considered a moderate abundance of smallmouth bass.

A total of 214 different smallmouth bass were captured and measured to assess size structure during our survey. The size structure of the Roberts Lake smallmouth bass population is considered good with approximately 49.5% being ≥ 14 inches and 14.9% ≥ 17 inches.



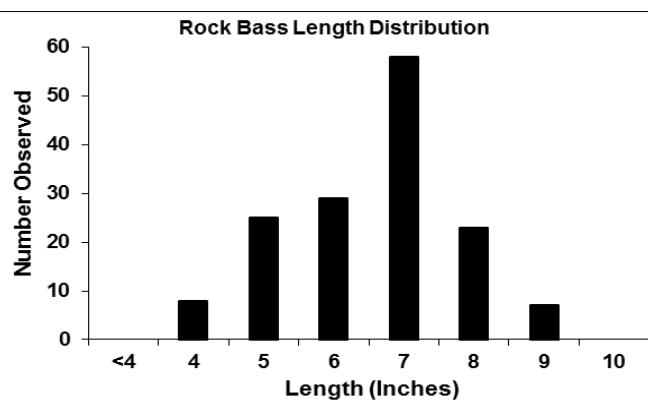
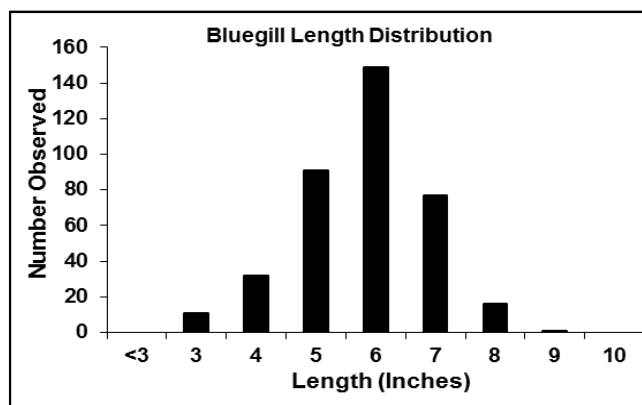
* Note: Adult bass are defined as all bass ≥ 8 inches long.

Bluegill



Fyke nets were used to capture summer spawning panfish from 6/8-10/2016. Bluegill were the most abundant panfish captured during this survey with a relative abundance of 37.3 fish/net-night. This relative abundance suggests that the bluegill population is of moderate abundance.

A random sample of 377 bluegill were measured to assess size structure. The size structure of the Roberts Lake population was slightly below average for this region with approximately 24.9% of the fish in our sample being ≥ 7 inches and 4.5% ≥ 8 inches.



Rock Bass



Rock bass were the 2nd most abundant panfish species during our June fyke net survey. Relative abundance of rock bass was 14.6 fish/net-night. This value indicates that rock bass are quite abundant in Roberts Lake when compared to other lakes in this region.

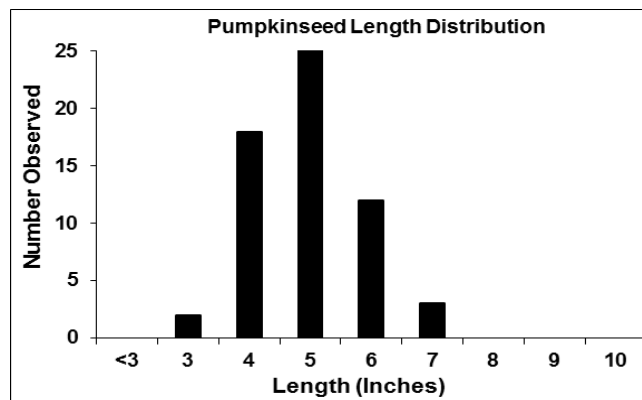
A random sample of 150 rock bass were measured to assess size structure. The size structure of this rock bass population is good with 58.7% of the fish sampled being ≥ 7 inches.

Pumpkinseed



Pumpkinseed were the 3rd most abundant panfish species during the June survey with a relative abundance of 7.6 fish/net-night. This abundance suggests that the population is of moderate abundance.

A random sample of 74 pumpkinseed were measured to assess size structure during our survey. Size structure of pumpkinseed was moderate-to-poor with approximately 20.3% of the fish in our sample being ≥ 6 inches.



Other Species

The species listed above were the focus of the 2016 survey, with surveys designed to best sample these individual species. During 2017 we will again conduct extensive fish surveys of Roberts Lake with surveys designed to assess walleye, northern pike, yellow perch, black crappie and muskellunge. Upon completion of the 2017 survey, information will be available summarizing the entire Roberts Lake fishery.

This report is interim only; data and findings should not be considered final.
For answers to questions about fisheries management activities and plans for Roberts Lake contact:

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